

Claims: -

1. A method for identifying a gene having a role in the presentation
5 of diabetic nephropathy, which method comprises culturing mesangial
cells in a medium in the presence of a concentration of glucose
sufficient to induce differential expression of a gene susceptible to such
differential expression and identifying the gene so induced by
suppression subtractive hybridisation.

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2. A method according to Claim 1, wherein the mesangial cells are
cultured in the presence of a concentration of glucose sufficient to
induce up-regulation of a gene susceptible to such up-regulation.

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3. A method according to Claim 1 or 2, wherein the concentration
of glucose is greater than 5 mM.

4. A method according to any preceding claim, wherein the
mesangial cells are subjected to mechanical strain.

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5. A method according to any preceding claim, wherein
transforming growth factor $\beta 1$ (TGF- $\beta 1$) is added to the culture
medium.

6. A method according to any one of Claims 1-5, wherein the possibility of differential expression due to hyperosmolarity is excluded.

5 7. A method according to any one of Claims 1-6, wherein the gene so differentially expressed is a gene which includes a sequence selected from:

10 1) SEQ ID NOS: 1-3;

2) SEQ ID NO: 4;

3) SEQ ID NO: 5; and

15 4) SEQ ID NO: 6.

8. Use of a gene identified by a method according to any one of Claims 1-7, as a diagnostic marker for the progression and presentation of diabetic nephropathy.

20 9. Use of a gene identified by a method according to any of Claims 1-7, as an index of disease activity and the rate of progression of diabetic nephropathy.

25 10. Use of a gene identified by a method according to any of Claims 1-7, as a basis for identifying drugs for use in the prevention and/or therapy of diabetic nephropathy.

11. A sequence selected from any one of SEQ ID NOS: 1-3, 5 and 6 according to Claim 7.

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